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In the claims

Please amend the claims as follows:

1. (currently amended) A compound of the general formula (I)

 $X(B)_m$

(I)

wherein

X is an m-valent unit and

B are identical or different and denote K-R, wherein

K is a bond or is $A^1-(A^2-A^3)_k$ -sp, wherein

 A^1 is $(CH_2)_t Y (CH_2)_u$, wherein

Y is >C=O, >NH, -O-, -S- or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination,

A² is –NHCO–, –CONH–, –OCONH– or SCONH–, or –CO–,

A³ is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or $-(CHQ)_r$, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and

m is at least 2,

with the proviso that

- (1) in the compound at least one R is not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and rn are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment $X(K)_m$ is less than 20,000.

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- 2. (previously presented) A compound according to claim 1, wherein the molar mass of the fragment X(K)_m is less than 4,000.
 - 3. (previously presented) A compound according to claim 1, wherein
 - m is an integer from 2 to 4, and
 - is CH_{4-m} , NH_{3-m} , N^+H_{4-m} , >P- (when m=3), $>P^+<$ (when m=4), >B- (when m=3), a linear atom group C_2 H_{6-m} , $>CH(CH_2)_zCH<$, >C=C<, >N- N<, $>N(CH_2)_zN<$ wherein z=2-6, when m=4), a carbocyclic atom group C_6H_{6-m} , C_6H_{12-m} , or a heterocyclic atom group C_3N_3 (when m=3), C_4N_2 (when m=4).
- 4. (previously presented) A compound according to claim 1, wherein there are at least 3 K.
- 5. (previously presented) A compound according to claim 1, wherein at least two R are not hydrogen.
- 6. (previously presented) A compound according to claim 1, wherein at least three R are not hydrogen.
 - 7. (canceled)
- 8. (previously presented) A compound according to claim 1, wherein the ligand R is sialic acid, sialyl lactose, sialyl lactosamine, lactose, mannose, Galα1-3Gal, Gal1α-3(Fucα1-2)Gal, GalNAcα1-3(Fucα1-2)Gal, Neu5Acα2-6GalNAc, SiaLe^A, SiaLe^X, HSO3Le^A, HSO3Le^X, Galα1-3Galβ1-4GlcNAc, Galα1-3Galβ1-4Glc, HSO3GlcAβ1-3Galβ1-4GlcNAc, N-acetyllactosamine or polylactosamine, or wherein the ligand R is sialic acid benzyl glycoside, HSO3GlcAβ1-3Gal, HSO3GlcAβ1-3Galβ1-4Glc, GalNAcα, GalNAcα1-

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3(Fucα1-2)Galβ1-4GlcNAc, Galα1-3(Fucα1-2)Galβ1-4GlcNAc, HSO₃(Sia)Le^X, HSO₃(Sia)Le^A, Le^Y, GlcNAcβ1-6(GlcNAcβ1-3)Galβ1-4Glc, GalNAcβ1-4(Neu5Acα2-3)Galβ1-4Glc, mannose-6-phosphate, GalNAcβ1-4GlcNAc, oligo-sialic acid, N-glycolylneuraminic acid, Galα1-4Galβ1-4Glc, or Galα1-4Galβ1-4GlcNAc.

- 9. (previously presented) A compound according to claim 1, wherein
- m is an integer from 2 to 4,
- X is CH_{4-m} ,
- A^{1} is CH_{2} ,
- A² is NHCO,
- A^3 is CH_2 ,
- k is 8,
- sp is (CH₂)₃CONHCH₂CONHC₆H₄-4-CH₂O- and
- R is Neu5Acα2-6Galβ1-4GlcNAc.
- 10. (currently amended) An aggregate of the general formula (II):

$$\{X(B)_m\}_n$$

(II)

wherein X(B)_m may be identical or different and denote a compound of the general formula (I),

$$X(B)_m$$

(I)

wherein

- X is an m-valent unit and
- B are identical or different and denote K-R, wherein
 - K is a bond or is A^{1} - $(A^{2}-A^{3})_{k}$ -sp, wherein
 - A¹ is (CH₂)_tY(CH₂)_u, wherein
 - Y is >C=O, >NH, -O-, -\$- or a bond,
 - t is an integer from 0 to 6 and
 - u is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination.

A² is -NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-,

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 A^3 is (CH₂)_r, O(CH₂)_r, NH(CH₂)_r, S(CH₂)_r or -(CHQ)-, wherein

is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

is a divalent spacer or a bond, and SD

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and

is at least 2, m with the proviso that

n

in the compound at least one R is not hydrogen, (1)

- there are at least two K that are not a bond, and (2)
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)_m is less than 20,000, and is from 2 to 100,000,

and wherein X(B)_m are non-covalently bonded.

- 11. (previously presented) An aggregate according to claim 10 having a leaf-like, linear, cyclic, polycyclic, polyhedral, spherical or dendritic structure.
- 12. (currently amended) An aggregate according to claim 10 of two or more different compounds comprising a compound of the general formula (I)

$$X(B)_m$$
 (I)

wherein

X is an m-valent unit and

В are identical or different and denote K-R, wherein

> is a bond or is $A^1-(A^2-A^3)_k$ —sp, wherein K

> > A^1 is (CH₂)_tY(CH₂)_u, wherein

is >C=O, >NH, -O-, -S- or a bond, Y

is an integer from 0 to 6 and t

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is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination,

A² is -NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-,

A³ is (CH₂)_r, O(CH₂)_r, NH(CH₂)_r, S(CH₂)_r or -(CHQ)-, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and m is at least 2,

with the proviso that

- (1) in the compound at least one R is not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment $X(K)_m$ is less than 20,000.
 - 13. (canceled)
- 14. (previously presented) A method according to claim 27, further comprising adding a concentrated salt solution, changing the pH or the temperature, or adding organic solvents.
- 15. (currently amended) A method for changing the structure of an aggregate of the general formula (II)

 $\{X(B)_m\}_n \tag{II}$

wherein X(B)_m may be identical or different and denote a compound of the general formula (I),

 $X(B)_m$ (I)

wherein

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- X is an m-valent unit and
- B are identical or different and denote K-R, wherein

K is a bond or is $A^1-(A^2-A^3)_{k-sp}$, wherein

 A^1 is $(CH_2)_t Y (CH_2)_u$, wherein

Y is >C=O, >NH, -O-, -S- or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination,

A² is -NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-,

 A^3 is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or -(CHQ)-, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and

m is at least 2,

with the proviso that

- (1) in the compound at least one R is not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment $X(K)_m$ is less than 20,000, and
- n is from 2 to 100,000,

and wherein X(B)_m are non-covalently bonded,

further comprising adding a concentrated salt solution, changing the temperature or the pH and/or adding urea, trifluoroethanol or peptides.

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- 16. (previously presented) A method according to claim 27 further comprising increasing the specific physiological activities of molecules by incorporating a radical R into a compound of the general formula (I).
 - 17. (canceled)
- 18. (currently amended) A method of treating diseases arising from inflammation, viral and bacterial infections, influenza viruses, selectin-mediated inflammatory processes, tumour metastases, or in the neutralisation of antibodies in autoimmune disorders and transplants; said method comprising administering a compound of the general formula (I)

 $X(B)_m$ (I)

wherein

X is an m-valent unit and

B are identical or different and denote K-R, wherein

K is a bond or is $A^1-(A^2-A^3)_k$ -sp, wherein

 A^1 is $(CH_2)_1Y(CH_2)_{11}$, wherein

Y is >C=O, >NH, -O-, -S- or a bond,

t is an integer from 0 to 6 and

u is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination.

A² is -NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-,

 A^3 is $(CH_2)_t$, $O(CH_2)_t$, $NH(CH_2)_t$, $S(CH_2)_t$ or $-(CHQ)_-$, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and

m is at least 2, with the proviso that

(1) in the compound at least one R is not hydrogen,

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- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)_m is less than 20,000; or administering into an aggregate of the general formula (II)

$$\{X(B)_m\}_n \tag{II}$$

wherein

X(B)_m may be identical or different and denote a compound of the general formula (I), and n is from 2 to 100,000, and wherein X(B)_m are non-covalently bonded.

- 19. (canceled)
- 20. (previously presented) A method according to claim 18 further comprising preparing functionalized molecular surfaces.
 - 21. (canceled)
 - 22. (canceled)
 - 23. (currently amended) A compound of the general formula (I),

$$X(B)_m$$

(I)

wherein

- X is an m-valent unit and
- B are identical or different and denote K-R, wherein

K is a bond or is $A^1-(A^2-A^3)_k$ -sp, wherein

 A^1 is $(CH_2)_t Y (CH_2)_u$, wherein

is >C=O, >NH, -O-, -S- or a bond,

t is an integer from 0 to 6 and

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u is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination,

A² is –NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-.

A³ is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or -(CHQ)-, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and m is at least 2, with the proviso that

- (1) X, B and m are so selected that an intermolecular association of the K in liquid phase is possible, especially under aqueous conditions, by the formation of hydrogen bonds, with formation of aggregates, and
- (2) the molar mass of the fragment $X(K)_m$ is less than 20,000, especially less than 4000.

24-26. (canceled)

27. (currently amended) A method of preparing an aggregate comprising: preparing a compound of the general formula (II)

$$\{X(B)_m\}_n \tag{II}$$

wherein

X(B)_m may be identical or different and denote a compound of the general formula (I),

$$X(B)_m$$
 (I)

wherein

X is an m-valent unit and

B are identical or different and denote K-R, wherein

K is a bond or is A^1 - $(A^2$ - $A^3)_k$ -sp, wherein

A¹ is (CH₂)_tY(CH₂)_u, wherein

Y is >C=O, >NH, -O-, -S- or a bond,

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t is an integer from 0 to 6 and

u is an integer from 0 to 6,

 (A^2-A^3) can be any A^2 and any A^3 in any combination,

A² is -NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-,

A³ is (CH₂)_r, O(CH₂)_r, NH(CH₂)_r, S(CH₂)_r or -(CHQ)-, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor; and

m is at least 2, with the proviso that

- (1) in the compound at least one R is not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)_m is less than 20,000, and
- n is from 2 to 100,000,

and wherein X(B)_m are non-covalently bonded.

28. (currently amended) A method of preparing a therapeutic drug comprising: preparing the compound of the general formula (I)

$$X(B)_m$$
 (1)

wherein

X is an m-valent unit and

B are identical or different and denote K-R, wherein

K is a bond or is $A^1-(A^2-A^3)_{k-sp}$, wherein

 A^1 is $(CH_2)_t Y (CH_2)_u$, wherein

Y is >C=O, >NH, -O-, -S- or a bond.

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t is an integer from 0 to 6 and

u is an integer from 0 to 6,

(A²-A³) can be any A² and any A³ in any combination,

A² is -NHCO-, -CONH-, -OCONH- or SCONH-, or -CO-,

A³ is $(CH_2)_r$, $O(CH_2)_r$, $NH(CH_2)_r$, $S(CH_2)_r$ or $-(CHQ)_r$, wherein

r is an integer from 1 to 6 and

Q is a substituted or unsubstituted alkyl or aryl group,

sp is a divalent spacer or a bond, and

k is an integer from 5 to 100, and

R is hydrogen or a ligand suitable for specific bonding to a receptor, and

m is at least 2,

with the proviso that

- (1) in the compound at least one R is not hydrogen,
- (2) there are at least two K that are not a bond, and
- (3) X, B and m are so selected that an intermolecular association of the K in liquid phase by the formation of hydrogen bonds is possible, with formation of aggregates that present on the surface a plurality of R that are not hydrogen, and
- (4) the molar mass of the fragment X(K)_m is less than 20,000; or preparing the compound of the general formula (II):

$$\{X(B)_m\}_n \tag{II}$$

wherein .

X(B)_m may be identical or different and denote a compound of the general formula (I), and

n is from 2 to 100,000,

and wherein X(B)_m are non-covalently bonded; and a pharmaceutically acceptable carrier.

29. (canceled)